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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/789,469

02/27/2004

Uwe Nigrin

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EXAMINER

TRIEU, THERESA

ART UNIT

PAPER NUMBER

3748

MAIL DATE

DELIVERY MODE

06/14/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/789,469

Applicant(s)

NIGRIN, UWE

Examiner

Theresa Trieu

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3748

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>Feb. 27, 2004</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Germany on Aug. 31, 2001. It is noted, however, that applicant has not filed a certified copy of the DE 10142712.3 application as required by 35 U.S.C. 119(b).

Drawings

2. Applicants are required to shade the *rotor, vanes, cam ring, side plate, pump casing* with the shading scheme with represents a *plastic* (see MPEP §608.02).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 6, 8 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taguchi (Publication Number JP 62-000684).

Regarding claims 1, 2, 6, 8, 9 and 13, Taguchi discloses a vane cell pump for delivering fluids, comprising a rotor 14, a cam ring 11 and a plurality of vanes 19 which are pre-tensioned by means of spring elements 17, 18, the spring elements 17, 18 being an integral part of the rotor 14, the spring elements are captively molded into the rotor; the spring elements being implemented as spiral spring 23. However, Taguchi fails to disclose the rotor being made of plastic being designated as duroplast.

It is examiner's position that one having ordinary skill in the vane cell pump art, would have found it obvious to utilize the plastic rotor, since they are merely design parameters, depending on temperature, pressure, or stress acted/applied on the rotor or depending on being used for a particular purpose or solving a stated problem. Moreover, there is nothing in the record which establishes that the claimed plastic rotor under such conditions, presents a novel of unexpected result (See *In re Kuhle*, 526 F.2d 553, 188 USPQ 7 (CCPA 1975)). Also, the applicant should note that the selection of a know material based upon its suitability for the intended use is a design choice consideration within the skill of the art. *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960).

4. Claims 1-4, 6, 8-11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Udonon et al. (Udonon) (Publication Number JP 56-151296).

Regarding claims 1, 6, 8 and 13, Udonon discloses a vane cell pump for delivering fluids, comprising a rotor 3, a cam ring 5 and a plurality of vanes 2 which are pre-tensioned by means of spring elements 23-25 the spring elements 23-25 being an integral part of the rotor 3, the spring elements are captively molded into the rotor. However, Taguchi fails to disclose the rotor being made of plastic being designated as duroplast.

It is examiner's position that one having ordinary skill in the vane cell pump art would have found it obvious to utilize the plastic rotor, since they are merely design parameters, depending on temperature, pressure, or stress acted/applied on the rotor or depending on being used for a particular purpose or solving a stated problem. Moreover, there is nothing in the record which establishes that the claimed plastic rotor under such conditions, presents a novel of unexpected result (See *In re Kuhle*, 526 F.2d 553, 188 USPQ 7 (CCPA 1975)). Also, the

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applicant should note that the selection of a know material based upon its suitability for the intended use is a design choice consideration within the skill of the art. *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960).

Regarding claims 2-4 and 9-11, Udono discloses the spring elements are implemented as spring tongues 25; the spring elements being disposed on a ring 24; the spring elements being made of spring plastic.

5. Claims 5 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Udono in view of design choice.

Udono discloses the invention as recited above; however, Udono fails to disclose the vanes and/or the cam ring and/or a side plate and/or a pump casing being made of plastic. It is examiner's position that one having ordinary skill in the vane cell pump art would have found it obvious to utilize the material being plastic, since they are merely design parameters, depending on temperature, pressure, or stress acted/applied on the rotor or depending on being used for a particular purpose or solving a stated problem.

6. Claims 7 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Udono in view of design choice as applied to claim 1 and 8 above, and further in view of Grossner (Publication Number DE 1005007602).

The modified Udono discloses the invention as recited above; however, the modified Udono fails to disclose the vane pump being used as a pre-supply pump for a high-pressure pump of a common rail injection system.

It is examiner's position that one having ordinary skill in the vane cell pump art, would have found it obvious to utilize vane pump being used as supplying fluids, since they are merely

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design parameters, depending on being used for a particular purpose or solving a stated problem. Moreover, there is nothing in the record which establishes that the claimed vane cell pump for supplying fluid under such conditions, presents a novel of unexpected result (See *In re Kuhle*, 526 F.2d 553, 188 USPQ 7 (CCPA 1975)).

Prior Art

The IDS (PTO-1449) filed on Feb. 27, 2004 has been considered. An initialized copy is attached hereto.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and consists of three patents: Conde et al. (U.S. Patent Number 3,335,944), Gevelhoff et al. (U.S. Patent Number 5,100,308) and Genter (Publication Number FR 2761417), each further discloses a state of the art.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Theresa Trieu whose telephone number is 571-272-4868. The examiner can normally be reached on Monday-Friday 8:30am- 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on 571-272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TT
June 5, 2007



Theresa Trieu
Primary Examiner
Art Unit 3748